

REMARKS

Applicants have carefully reviewed and considered the Office Action dated May 19, 2004 and the references cited therein. In response, applicants have made clarifying amendments to claims 1 and 2 and added new claims 3-6. Applicants believe the application is now in condition for allowance. Accordingly, favorable reconsideration in light of the foregoing amendments and following remarks is respectfully requested.

Independent claim 2 stands rejected under 35 U.S.C. § 103 as unpatentable over U.S. Patent 5,887,914 ("the Hagenbuch '914 patent") in view of Caterpillar Release N149F ("the Caterpillar reference"). Applicants respectfully submit that the invention recited in claim 2 as well as in new claims 3-6 is not taught or suggested by either the Hagenbuch '914 patent or the Caterpillar Release. Claim 2 recites a body for a vehicle that is made by creating a three-dimensional volumetric model of a load to be carried in the body using data collected from an anticipated point of use. The three dimensional volumetric model includes corner voids. Significantly, as part of the adjustment of the design parameters to produce a finished body, a rear edge of the floor of the body is curved to correspond to the rear corner voids in the three-dimensional volumetric model.

An exemplary embodiment of a body having such a curved rear floor edge is shown in FIG. 25. As explained at page 20, line 29 through page 21, line 19 of the specification, the curving of the rear edge of the floor helps ensure that a load is placed in the proper position in the dump body during the loading process. In particular, curving the rear floor edge limits the space available at the rear of the dump body for retaining the load and thereby helps prevent an off-center loading condition. If an operator attempts to far rearward in the dump body, the material will simply fall off the rear edge. Neither the Hagenbuch '914 patent nor the Caterpillar Release teach or suggest curving the rear edge of the floor in such a manner. In fact, both references seem to show bodies having straight rear floor edges. Thus, amended claim 2 and new claims 3-6, which recite a curved rear edge as a predetermined design parameter determining a shape of the truck body, are allowable over the cited references.

Claim 1 stands rejected under 35 U.S.C. § 112 as indefinite and under 35 U.S.C. § 103 as unpatentable over the Hagenbuch '914 patent and U.S. Patent 5,815,960 ("the Soczka patent"). With respect to the § 112 rejection, the Examiner pointed to the phrases "volumetric capacity", "approximately ¼ or more" and "sidewalls are spaced relatively wider" as being indefinite. The Examiner also pointed to the terms "substantially minimizes the clearance...minimize splattering", "minimizing the height", "substantially off the center of the body", and "substantially greater height" in the body of the claim as being indefinite.

With respect to the preamble, applicants respectfully submit the terms “volumetric capacity” and “approximately $\frac{1}{4}$ or more” would be readily understood by those skilled in the art particularly in view of the explanation in the specification at page 21, line 20 through page 23, line 35. Moreover, applicants have amended claim to clarify these terms. As will be understood from the specification, the volumetric capacity of a loading bucket is the volume of material that a bucket can hold and the term “approximately $\frac{1}{4}$ or more” refers to the ratio of the bucket volumetric capacity to the body volumetric capacity. The term “sidewalls are spaced relatively wider” merely helps explain the purpose or intended use of the invention. Therefore, the term is not considered a limitation of the claims and any indefiniteness is not relevant.

With respect to the body of the claim, applicants submit that the term “minimizing a clearance” would be also be readily understood by a person skilled in the art particularly in view of the previously cited section of the specification. In particular, minimizing the clearance provides just enough space from the floor of the dump body for operation (i.e., swinging) of the swinging gate. The other terms identified by the Examiner are merely included to help identify the advantages of the invention and have sufficient definiteness to accomplish that purpose. Applicants respectfully submit that the § 112 rejection should be withdrawn.

Turning to the rejection based on the prior art, applicants submit that the cited references do not teach or suggest the claimed invention. The Hagenbuch ‘914 does not disclose any method for loading material into a dump body let alone a method that can be used when the volumetric capacity of the bucket is approximately $\frac{1}{4}$ or more of the volumetric capacity of the dump body.

As noted in the application, when loading conventional dump bodies with large capacity buckets, the clearance between the dump body floor and the swinging gate in the freed position cannot be minimized because the bucket operator must ensure that the bucket does not come into contact with the sidewalls of the dump body. As a result, the load must be dropped from the bucket at a relatively large distance above the floor of the dump body creating a substantial impact force when the dropping material contacts the floor of the dump body. These issues are addressed by the invention recited in claim 1.

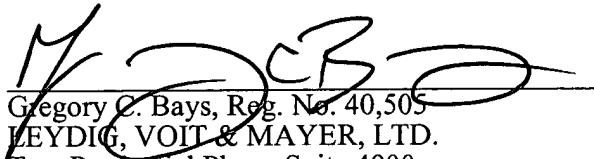
The Soczka patent discloses a retarding mechanism for a gate of a loading shovel. However, like the Hagenbuch ‘914 patent, it contains no teaching or suggestion as to how material can be loaded into a dump body when the loading shovel has a volumetric capacity of $\frac{1}{4}$ or more of the volumetric capacity of the dump body. In fact, it does not contain any appreciation of the issues involved when using a large capacity bucket such as one having a

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volumetric capacity of $\frac{1}{4}$ or more of the volumetric capacity of the dump body. FIG. 1 of Soczka patent cited by the Examiner is merely a background drawing showing usage of the Soczka dipper and can in no way be considered as teaching the invention of claim 1. Thus, claim 1 is patentable over the Hagenbuch '914 and Soczka patents.

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'G. C. Bays', is written over the printed name and firm name.

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